The Aleza Lake Experiment Station (1920's and 1930's)

FOREST SERVICE
BRITISH COLUMBIA

The Aleza Lake Experiment Station (1920's and 1930's)

by
Ralph Schmidt

February 1993

Citation

Schmidt, R.L. 1992. The Aleza Lake Experiment Station (1920's and 1930's) B.C. Min. For. Miscellaneous Report.

Co-published by the B.C. Ministry of Forests, Research Branch and the Forest History Association of British Columbia.

Copies of this report may be obtained, depending on supply, from:

Research Branch
B.C. Ministry of Forests
31 Bastion Square
Victoria, British Columbia
V8W 3E7

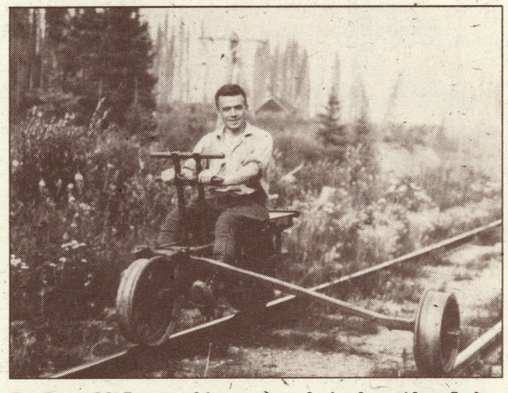
Cover photo: Aleza Lake Experiment Station camp in 1925. Removal of logs and debris still in progress.

Acknowledgments

Many individuals provided information and photographs of the past to make this report possible. All but the following have been acknowledged in the text of this report: Alf Bamford, Dick St. Clair, and Beatrice McKinnon.

The Pioneers

Bob St. Clair and his horse Nellie, Bull River, B.C., 1913. In 1923, as Assistant Chief Forester, Bob St. Clair recommended the establishment of two forest experiment stations. Within a year the Aleza Lake Experiment Station was established.



Dr. Percy M. Barr on his way by velocipede to Aleza Lake village in 1925. He selected the site for the experiment station, administered its establishment, and conducted research there for his M.F. and Ph.D. degrees.

Time Line

1920
- 1924 Aleza Lake Experiment Station established
- 1925 Tent camp prepared, log cabin built
- 1926 More buildings started, first scheduled logging
- 1927 Many active research projects, resident foreman hired

1930
- 1930 Local forest industry collapsed
- 1932 Dr. Percy Barr resigned to teach in the USA
- 1933 Research Division budget at an all-time low
- 1934 Research activities discontinued, buildings boarded up
- 1935 First year of Young Men's Forestry Training Plan (YMFTP)
- 1936 Ambitious YMFTP construction and improvement activities
- 1939 Research Division loses its identity

1940

Preface

This transcript is taken from a slide presentation given by Ralph Schmidt at the annual meeting of the Northern Silviculture Committee in Prince George, July 8, 1992. The meeting marked the occasion of the re-opening of the Aleza Lake Experiment Station, now called the Aleza Lake Research Forest.

Mr. Schmidt prefaced his talk about Aleza Lake with some background information:

> *I have prepared my talk for today in the form of some questions which explore the beginning of Forest Experiment Stations in British Columbia and the people who played dominant roles in their establishment.*
>
> *Before I start my presentation today, I will first clarify a few points, and then provide a synopsis of my background in forest history.*
>
> *First, the information for my talk today is based upon some of the material that I have accumulated for a major report on the history of the Research Branch. This report is not yet completed. So far I have concentrated on the 1920's and 1930's because there are still a few survivors of that era, and I want to ensure that their stories are not taken with them. Consequently I will not be saying much about the last 50 years. All but one of the slides I will show are from the period, 1925 to 1936.*
>
> *Second, I never worked at the Aleza Lake Experiment Station, so I have no first-hand information. My sources of information are a variety of reports and records and, especially, old-timers who are still around.*
>
> *Third and last, with so many young people in this audience today, I'm quite sure that most of you have already categorized me as an old-timer. If so,*

you are dead wrong! My definition of an old-timer is someone older than me, in fact by at least 15 years. Would you believe that the oldest survivor who worked at Aleza Lake 66 years ago is more than 30 years my senior? In company like that I feel more like a junior.

Having cleared up these points, I will give you a glimpse of my experience in writing forest history. I regard myself as a novice in this field, having been involved only since March of 1991, when I commenced the preparation of a report on the history of the Cowichan Lake Research Station.[1] A year ago June, I presented that report at the Annual Meeting of the Forest History Association of British Columbia. I had prepared it in response to a request by Bill Young, not because I had a profound interest in forest history. Bill was president of the Forest History Association, and he was stuck for a speaker.

I really could not turn him down. We had been friends for over 45 years, studied together at UBC, worked together as students in Forest Surveys, boarded together in Victoria, and also curled together. Moreover, as Chief Forester, Bill had been very supportive of the Research Division when I was the Director. How could I say no?

I felt obliged to accept, but I regarded the project as a chore to be completed as soon as possible — perhaps one week on research and two weeks on writing. But a month after starting this project I became an enthusiast of forest history. Here's what happened to me. I had become intrigued about the identity of the person responsible for originating the Young Men's Forestry Training Plan which played such a crucial role in determining the future of the Cowichan Lake Experiment Station. I poked around

[1] Schmidt, R.L. 1992. The history of Cowichan Lake Research Station. B.C. Min. For., Victoria, B.C. Miscellaneous Report.

in some strange places, and was successful in identifying that person. Then I stumbled upon several new sources of information and photographs from the 1930's and 1940's. I also got excellent cooperation from old-timers who were interested in preserving the past. I had finally discovered the 'fun' part of this new hobby, and became well hooked on forest history.

My presentation of the Cowichan Lake report was well received, and a decision was made for joint publication. At the close of the meeting, Dr. Ted Baker asked me if I was interested in preparing a report on the history of the Research Branch, and I agreed without question. Three years previously I had shied away from the same request.

The ranks of the old-timers are gradually but steadily thinning out. This continuity with our past will eventually fade away completely. Consequently I have gone to great lengths to obtain as much detail as possible on the early history of the Aleza Lake Experiment Station.

Some of these old-timers are still blessed with remarkable memories. With gentle prodding from me they have recalled details which they have not thought about for many decades. This has helped me in many ways, particularly in tracing the whereabouts of survivors who left the B.C. Forest Service nearly 60 years ago. For this help I owe much to Dr. Braham Griffith, Cedric Walker, Jim Curtis and Dick Spilsbury.

The Aleza Lake Experiment Station During the 1920's and 1930's

Who introduced the concept of forest experiment stations in the B.C. Forest Service?

He was a forester, born and educated in the USA, who came to British Columbia in 1912 equipped with a Civil Engineering degree from Idaho, as well as a Masters in Forestry from Michigan. Before coming to British Columbia, Bob St. Clair had worked in National Forests in Montana and Idaho and had some knowledge of Forest Experiment Stations established by the U.S. Forest Service.

He started working for the B.C. Forest Service in 1918 and rose quickly through the ranks to become Assistant Chief Forester in 1923. In October of that year he wrote a four-page report which addressed the need for forest research. He identified the need for a strong research program headquartered in Victoria. (At that time there were only two full-time researchers in the B.C. Forest Service, and there was no Research Division.) St. Clair also recommended that the B.C.F.S. follow the example of the U.S. Forest Service by establishing a Forest Experiment Station in each of the principal forest regions:

> *As a start along this policy I would suggest the establishment of two stations, one to be located on the southern coast, and the other in the northern interior along the Grand Trunk Railway.*

I think that this explanation answers the first question satisfactorily, but before we go on to the next question I would like to mention a second reason why Bob St. Clair could claim another distinction. He was the only member of the B.C. Forest Service who served as Assistant Chief Forester more than once. In fact he did it three times. He became Assistant Chief Forester in 1923, 1926, and 1946.

But that's another story in itself. We'd better get on with the next question.

Who was the driving force behind the planning and development of Aleza Lake Experiment Station?

Although Percy Barr had just graduated as a forest engineer from UBC in May 1924, and despite the fact that he had no previous experience as a researcher, he played a key role in the selection of the Aleza Lake Experiment Station, and in the planning and supervising of its development. In May of 1924, Barr started field work on the Aleza Lake reserve. He established sample plots with the help of Harold McWilliams and John Harvie. Barr also visited all nearby sawmills to become familiar with their log requirements. Upon Barr's recommendations, the assistant Chief Forester, St. Clair, requested C.D. Orchard (who worked with Forest Surveys) and J.M. Gibson (District Forester, Prince George) to jointly draw up proposed boundaries for the station.

It is somewhat surprising that Barr was given so much responsibility immediately upon graduation. However, Barr had demonstrated leadership talent at an early age. He had joined the Canadian Infantry in 1915 at the age of 18 and at the end of the war he emerged as an officer in the Royal Flying Corps.

Percy Barr had also demonstrated leadership talent in the Forest Surveys Division. Each summer while attending UBC he worked in a Forest Survey field party. After only three summers' experience he was promoted to Party Chief of a 12-man crew. In the history of the Forest Surveys Division (Inventory), only one other individual became a party chief while still an undergraduate, and then it was after 10 field seasons. In fact, there were instances where graduate foresters with 5 to 10 years of field experience never did get to be a party chief.

At 27 years of age, Barr was older than the average graduate, since his university training had been delayed by the war. So, although he was a brand new graduate in 1924, he was not exactly wet behind the ears.

Barr attacked the job at Aleza with energy and enthusiasm and so impressed his superiors that he was made head of the

Research Division when it was established in 1927. He also conducted research at Aleza and used the data for his theses at Yale (M.F. in 1925 and Ph.D. in 1929).

What were the research priorities at Aleza?

There were two main objectives:

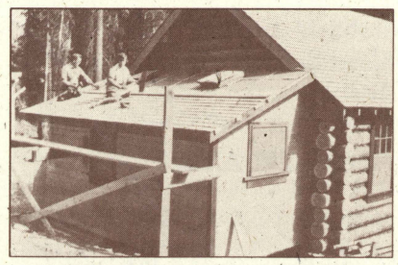
- to demonstrate sustained yield forestry at a practical level; and
- to conduct research, especially of factors influencing natural regeneration after logging.

In order to begin the establishment of a demonstration forest, an accurate forest inventory was essential. A four-man survey crew tackled the job in 1925: Cedric Walker, Eric Garman, Ken McCannel and John Dawson. Cedric came to Aleza Lake as a lad of 17 after completing his first year at the College of Forestry, University of Washington. Cedric has been a big help in establishing our linkages with these early days. During the past six months, I have spent many enjoyable hours listening to some great stories of the past.

Joe Gerlitzki and team of horses clearing the campsite in 1925.

The 1925 survey crew (Cedric Walker, Ken McCannel, John Dawson and Eric Garman).

Percy Barr wasted no time in placing Aleza Lake Experiment Station on the map. By the fall of 1925 there were sufficient tent facilities to accommodate and feed over 40 people. In October, a training school was held for the rangers of the Prince Rupert and Fort George forest districts. Instruction was provided by Percy Barr and Ernest Manning, as well as the District Foresters of the two northern forest districts.

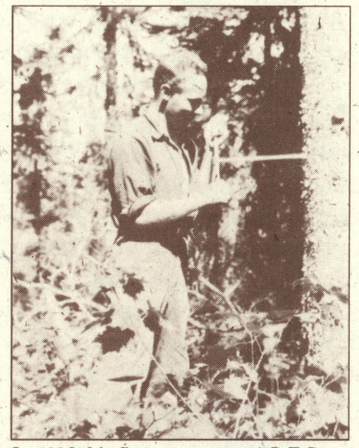


A lean-to was added to the log cabin in 1926. Percy Barr and his wife did the shingling job.

Barr was enthusiastic about his ongoing post-graduate studies at Yale, and he strongly influenced Joe Falconer to follow in his footsteps. Falconer went to Yale and earned his M.F. in 1929 and his Ph.D. in 1932. I realize that I am digressing here, but I must tell you about Joe Falconer. He lives in Victoria and is probably the oldest forester in Canada. He is looking forward to his 99th birthday in three months. This survivor of many careers retired at the age of 93.

In 1926 Eric Garman (left), assisted by Fin McKinnon, studied natural regeneration on cutovers near A.L.E.S. A model-A Ford was the primary transportation.

The pace of activities at Aleza Lake was stepped up during the summer of 1926. The forest inventory was completed by two recent forestry graduates, Fred Elley and Joe Falconer, assisted by two compassmen.



In 1926, his first summer at A.L.E.S., Braham Griffith assisted in several research projects. He is shown here using an increment borer to obtain the age of a spruce tree.

The year 1926 also witnessed the initiation of several more research projects.

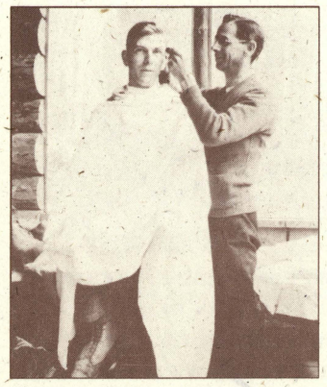
George Barnes, a forest mensurationist, along with Braham Griffith's help, established permanent sample plots in mature spruce-balsam forests. Griffith studied root development of white spruce regeneration, and Barr

worked on his studies of factors influencing natural regeneration of spruce.

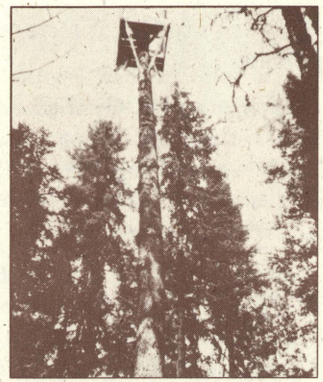
Incidentally, Dr. Griffith eventually spent more time at Aleza Lake than any other researcher during the 1920's and 1930's. He worked there from 1926 to 1934, with the exception of one year when illness prevented him from making his annual trek.

Over the next four years, the Aleza Lake station became a hive of activity as a consequence of Barr's ability to generate support. The Research Division staff was tripled and the funding allocation increased to the point where it equalled that of the Dominion Forest Service research budget for all of Canada. Here is a short list of the activities at Aleza in those hectic days:

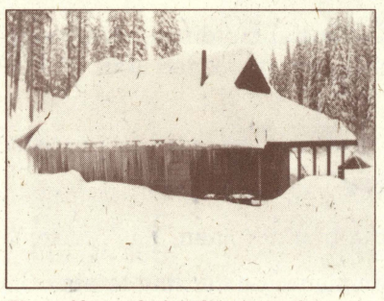
- Several substantial buildings were erected to accommodate operations and staff and to provide lab and office facilities.
- The main road was improved to a satisfactory standard.
- A soil survey was completed by R. Fisher.
- A resident station foreman, Ray Sansom, was hired.
- Logging commenced according to plan (in the winter of 1926/27, 1 million board feet was logged).
- A fire lookout was prepared.
- A small nursery was established.
- Additional research projects were established (including studies in forest pathology by Professor Frank Dickson at UBC).
- Ranger training courses were held each fall.



Professor Frank Dickson demonstrating his tonsorial skill on Eric Garman (1927).



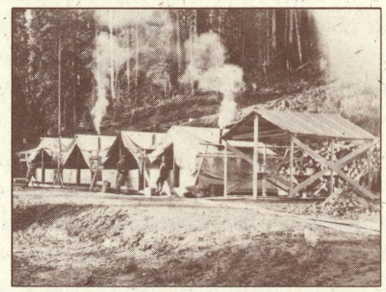
A Douglas-fir veteran on the ridge above the camp was converted to a forest fire lookout.



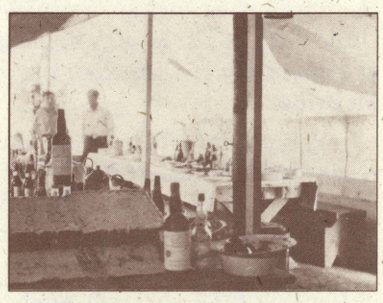
The cookhouse during the winter of 1927/28. Ray Sansom, the station foreman, and family lived on the station year-round.

The Sansom family in 1927.

The station was a busy place in 1929, with a staff of 17.



A tent camp prepared for a ranger meeting in 1929.



A good time was had by all at the wind-up of the 1929 ranger meeting.

When did research activities collapse at Aleza Lake, and why?

The first omen of trouble appeared during the winter of 1927/28 when the local sawmill folded after logging only one fifth of the prescribed annual cut at the station. As a consequence, the plans for creating a demonstration sustained yield forest were threatened. Over the next couple of years, Barr tried desperately to resurrect logging operations, and even settled for a much smaller cut in 1929/30. However, the depression soon caused the complete collapse of the local forest industry and gave the kiss of death to the concept of a demonstration sustained yield forest.

The depression also had an equally devastating effect on the Research Division as a whole. As research funding decreased, an exodus of staff occurred, and the researchers scattered to the four winds.

Cliff Riley, who had been in charge of developing Cowichan Lake Experiment Station, took a job as a forest pathologist in Ottawa. Fred Elley joined a life insurance company and ended up in New York. Stig Schenstrom, who had established the first thinning plots in British Columbia, headed for South America. Jim Curtis left to teach forestry at Massachusetts State College. Braham Griffith accepted a teaching fellowship at the University of Washington before becoming a professor at UBC. George Barnes became a professor in forest mensuration at University of Utah. Jim Robertson took on a teaching position at University of Colorado. Ray Sansom became the Ranger at McBride.

Percy Barr left in 1932, earlier than some of the other researchers, to teach at the University of California (Berkeley) where he established an illustrious career. His departure was probably the most serious loss to the Research Division. He had been an energetic and dynamic leader. When he left, the spirit of the Research Division weakened considerably.

By the summer of 1936 there were only two people in the Research Division, Eric Garman and Fin McKinnon.

Incidentally, Barr never did sever all connections with British Columbia. In 1936 his advice was sought by the Dean of

Applied Science at UBC on the forestry curriculum at the University. Barr conducted a study and made recommendations which were taken seriously. His contributions were recognized, and in 1945 he was acknowledged by UBC with an honourary Doctor of Science degree.

As a professor, Barr was highly regarded at the University of California, and he accomplished a great deal. He again demonstrated his leadership qualities in the military during WW II as an intelligence officer in the U.S. Army Air Force, where he rose to the rank of colonel.

There is no way that we can assess what accomplishments Barr might have achieved, had he chosen to ride out the depression in the Research Division. But we do know that Barr was an enthusiastic and energetic fighter. He would have done his utmost to prevent the almost total disintegration of the Research Division, and its complete loss of identity which occurred in 1939.

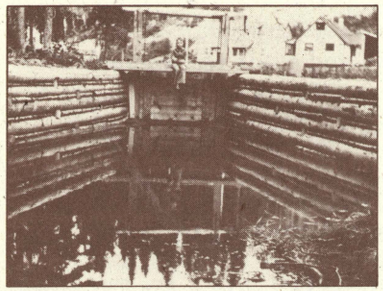
Braham Griffith left Aleza Lake in 1934, and the windows of the buildings were boarded up. Only a few assessments of research plots were made over the next 10 years.

Here are a few figures that underline this collapse at Aleza Lake:

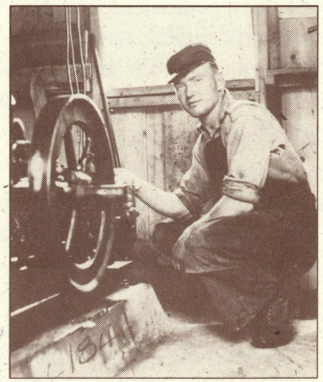
- From 1926 to 1930 the average annual research budget for Aleza Lake, over and above salaries was $11,400.
- In 1931 the budget was $2,700; in 1932, $1,900; in 1933, $125; and in 1934, $110 (and this was probably spent on boarding up the windows).

What brought about the sudden resurgence of activity at Aleza Lake in 1935?

In 1933, Canada had 1½ million people on the dole. The Dominion Government was concerned about the possibility of civil unrest, so a national relief program was started in 1934. The main objective was to get young unemployed men off the streets and into relief camps scattered in outlying localities. One hundred and twenty relief camps were set up across Canada, with a high percentage in British Columbia.

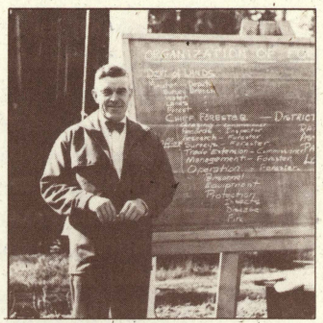


Ten-year-old Jim Kinghorn sitting on the dam built by the YMFTP crew for a water supply system in 1936.



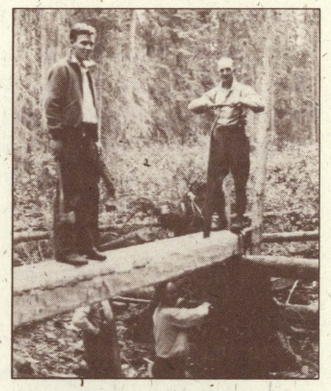
A power plant was installed by the YMFTP crew in 1936.

View at the camp after electrical service was installed by YMFTP crew.



Mike Gregg instructing the YMFTP crew.

Malcolm Knapp instructing the YMFTP crew.



A manually operated pit saw was used to cut sills for new foundations (on concrete footings) for the older buildings. Ken McCannel (above) and Malcolm Knapp (below) obviously posed for this photo while on a visit to Aleza Lake.

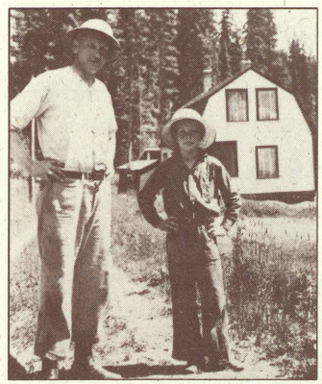
These camps were operated in a quasi-military style with harsh rules, poor food and a daily pay of 20 cents. They provided ripe ground for leftist organizers, and soon all British Columbia camps were unionized. In April of 1935, the relief workers left the camps, congregated in Vancouver, and subsequently started a trek to Ottawa with transportation provided by the CPR. They were stopped at Regina and the ill-famed Regina Riot occurred.

Meanwhile, the Pattulo government in Victoria had designed a much more enlightened relief program, thanks to MLA, Hugh Savage, a newspaper man from Duncan. This program was the Young Men's Forestry Training Program's (YMFTP). The word "Training" in the title was significant.

This plan was activated in May 1935 and $90,000 was allocated to the B.C. Forest Service to get on with the job. There may well have been an underlying reason for entrusting the Forest Service to do the job. In 1932 there had been an exposé of relief camp corruption, in which the relative of a cabinet minister had received an annual rent of $7,000 when his property was used as a relief camp.

The impact of the YMFTP upon the Aleza Lake Experiment Station was incredible. After a "low gear" start in 1935, the station was allotted $11,000 in 1936. Under H.C. Kinghorn's supervision, a power plant was installed and all camp buildings were provided with electricity. A reliable water supply system was developed for daily camp requirements and fire protection. Several new service buildings were built and older buildings were provided with more permanent foundations. All buildings were painted and given minor repairs where needed. The main road was improved, cribbing and culverts were installed where needed, and a network of trails was constructed throughout the forest.

Unfortunately, the infusion of all this money had little impact upon forest research at Aleza Lake. It is significant that the research residence was the only building at Aleza Lake that remained boarded up throughout the relief crew activities.



Jim Kinghorn and his father in front of the boarded-up researcher residence, no longer in use.

By 1937 the Dominion Government was convinced that British Columbia had a sound relief program, and a national program, the Youth Forestry Training Plan, was initiated along similar lines to provide opportunities for all provinces.

World War II soon put a stop to relief programs, and the windows at Aleza Lake were again boarded up, and the whiskey jacks, porcupines and black bears were again deprived of cookhouse garbage.

Although I have not yet completed the section of my report dealing with the history of the Aleza Lake Experiment Station after 1939, I can at least provide you with a brief synopsis of events after that date.

During WW II very little happened at the station other than some plot measurements in 1943, probably conducted by J. L. Alexander.

In 1945, Mickey Pogue, fresh out of the RCAF, used the Aleza Lake camp as a base while studying regeneration of white spruce after logging. The station was used during the summers of 1948 and 1949 as a base camp for Forest Survey field crews.

Also in 1949, a resident research forester, Larry de Grace, was appointed to reactivate the station for research purposes. In that year, Al Fraser used the camp as headquarters for a study of residual stands following tree-length logging. In 1952, Tim Decie replaced de Grace. There was much activity at Aleza, including studies of alternative harvesting methods, scarification trials, forest nursery and natural regeneration.

All of this came to an abrupt end when a decision was made to close the station because of funding limitations. On December 11, 1963, buildings that could not be relocated

elsewhere were destroyed by fire. The station was abandoned, the only activity being the remeasurement of permanent sample plots by a few dedicated staff members such as Harry Coates.

If there is any lesson to be learned from the past, it must be in the area of research funding commitments.

I don't know whether the allocation of funds for research has changed significantly since I retired 10 years ago. In my day it was always necessary to scrounge for funds from sources outside the Research Division.

Important Players in the History of Aleza Lake Experiment Station

Alexander, J.L.	- Forest mensurationist in Research Division 1921–1927 and 1942–1951 - was the first full-time researcher hired in the B.C. Forest Service
Bamford, A.R.	- worked at Aleza Lake Experiment Station in 1936 YMFTP crew - long career in Reforestation Division, B.C. Forest Service
Barnes, G.H.	- was a forest mensurationist in the Research Division, B.C. Forest Service, 1926-1936
Barr, P.M.	- in charge of Research Division, B.C. Forest Service, 1927–1932 - left B.C. to teach in the USA
Coates, H.G.	- forest technician in Research Division, Prince George District, since 1959
Curtis, J.D.	- silviculturist in Research Division, B.C. Forest Service, 1929–1932 - left B.C. to teach in the USA
Dawson, J.C.	- temporary employee, usually on fire suppression crews in Nelson District
Decie, T.P.	- in charge of Aleza Lake, 1952–1964
de Grace, L.A.	- in charge of Aleza Lake, 1949–1952
Dickson, F.	- forest pathologist at UBC in the 1930's
Elley, F.W.	- worked in Forest Survey field parties, mostly as a mensurationist - left B.C. Forest Service in 1931 to go into the life insurance business

Falconer, J.G.
- worked briefly in B.C. Forest Service: Research Division (1926) and Forest Surveys Division (1929)
- a man of many careers who retired at age 93

Fisher, R.A.
- a soils expert in the Forest Surveys Division during the 1920's

Fraser, A.R.
- forest mensurationist, biometrician, and technical advisor in Research Division, 1946–1979 (retired)

Garman, E.H.
- one of two researchers who worked continuously in the Research Division during the depression
- retired in 1962, and recently celebrated his 94th birthday

Gerlitzki, J.
- local resident involved in preparation of the Aleza Lake campsite, cabin building and road construction in 1925 and 1926

Gibson, J.M.
- in administration of the B.C. Forest Service in the 1920's and 1930's
- left the B.C. Forest Service to become Dean, School of Forestry, University of New Brunswick

Gregg, E.G.
- in the B.C. Forest Service 1923 to late 1940's
- was District Forester at Prince George during the 1930's

Griffith, B.G.
- in Research Division, 1926–1936
- left the B.C. Forest Service to teach at UBC
- my most reliable and prolific source of information on the early days at the Research Division
- recently celebrated his 90th birthday

Harvie, J.T.
- temporary crewman from Giscome

Kinghorn, H.C.
- worked briefly for the B.C. Forest Service
- was in charge of YMFTP crew at Aleza Lake in 1936

Kinghorn, J.M.
- a researcher in entomology and nursery systems in the Canadian Forestry Service, 1949–1981
- made available a big collection of well-documented photographs taken by his father at Aleza Lake in 1936
- provided information about his 1936 summer holiday spent at Aleza Lake

Knapp, F.M.
- UBC forestry professor, 1922–1965
- gave forestry lectures at all YMFTP camps during his summer holidays

McCannel, K.C.
- in Forest Surveys Division during the 1920's and 1930's
- was in charge of the YMFTP for the entire province in 1935 and 1936

McKinnon, F.S.
- in the Research Division in the 1920's and 1930's
- became Deputy Minister in 1965, retired from government in 1973

McWilliams, H.G.
- worked primarily in Forest Surveys Division from the mid-1920's to mid-1930's, when he took on increasing responsibilities in reforestation
- became forester in charge when Reforestation Division was established in 1946

Manning, E.G.
- was in charge of Management Division, B.C. Forest Service when he lectured at Aleza Lake
- became Chief Forester in 1936

Orchard, C.D.
- rose through the ranks from Forest Survey party chief (1921) to Chief Forester (1941)

Pickford, A.E.
- silviculturist and nursery specialist in the Research Division, 1923–1930
- was first superintendent at Green Timbers nursery, 1930–1936

Pogue, H.M.	- lengthy and distinguished career in Forest Surveys, 1927–1942 and 1945–1960 - retired in 1976 as District Forester, Vancouver
Riley, C.G.	- was in charge of developing Cowichan Lake Experiment Station, 1929–1930 - left Research Division for a career as a forest pathologist with the Dominion government
St. Clair, R.C.	- mostly in administrative work during his B.C. Forest Service career, 1918–1952
Sansom, H.R.	- left assistant ranger position to become foreman at Aleza Lake in 1927 - left Aleza Lake in 1931 to become ranger at McBride
Savage, H.	- Independent MLA from Duncan, 1934–1938 - owned Cowichan Leader newspaper
Schenstrom, S.R.	- silviculturist in Research Branch, 1929–1931 - left B.C. to work in South America
Spilsbury, R.H.	- soil specialist during the 1930's - became Forester-in-Charge of Research Division in 1951
Walker, C.W.	- his B.C. Forest Service career was mostly in Forest Surveys Division - left the B.C. Forest Service in 1946 to become a consulting forester
Young, W.	- B.C. Forest Service career started in Forest Surveys, 1949 - became Chief Forester in 1978 - president Forest History Association of B.C., 1988–1992